STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY :

:

:

Approval of Energy Efficiency and Demand : Docket No. 07-0540

Response Plan Pursuant to Section 12-103(f) :

Of the Public Utilities Act :

DIRECT TESTIMONY OF VINCENT J. CUSHING ON BEHALF OF THE BUILDING OWNERS AND MANAGERS ASSOCIATION OF CHICAGO

December 14, 2007

1 I. Introduction and Qualifications 2 Q. Please state your name and business address. 3 A. My name is Vincent J. Cushing. My business address is 1350 S. Indiana 4 Pkwy., Chicago IL 60605. 5 By whom are you employed and in what capacity? Q. 6 I am employed by Metropolitan Energy, LLC as its Senior Vice President A. 7 and by Clean Urban Energy, Inc. as CEO. 8 Q. On whose behalf are you testifying in this proceeding? 9 I am testifying on behalf of The Building Owners and Managers of A. 10 Chicago ("BOMA/Chicago"). 11 Q. Would you please summarize your professional qualifications? 12 I have 35 years experience in the electric energy industry as an engineer. A. 13 manager, energy consultant and executive. This experience encompasses 14 power contracting, grid operations and economics, 15 environmental compliance, residential & commercial demand response, 16 integrated resource planning, strategic planning, power supply planning. 17 and financial risk management. For over 25 years I held managerial 18 positions with responsibility for transmission, bulk power, PJM, and 19 strategic planning at the Potomac Electric Power Company. Prior to my 20 current positions, I served as Senior Vice President of Calpine Power 21 Services Company, an independent power company, and EnergyConnect, 22 Inc., a commercial building demand response company that I cofounded.

My professional resume is provided in Exhibit (VJC-1).

23

- 2425
- Q. Have you previously testified before the Illinois Commerce Commission (the "Commission" or "ICC")?
- 262728
- A. I have provided testimony and comments in workshops but not formally in a docketed proceeding in an ICC case. I have testified before the state regulatory commission in Washington, D.C. and served as electric utility industry liaison to the Federal Energy Regulatory Commission.
- 30

29

II. Purpose and Scope

A.

- 31
- Q. What is the purpose of your testimony?
- 3233
- the metering/data infrastructure proposal proposed by Mr. Skadowski in
- 34

this proceeding. I do that by explaining the benefits of robust demand

My testimony is intended to provide further BOMA/Chicago support for

35

infrastructure to the successful development of demand response resources

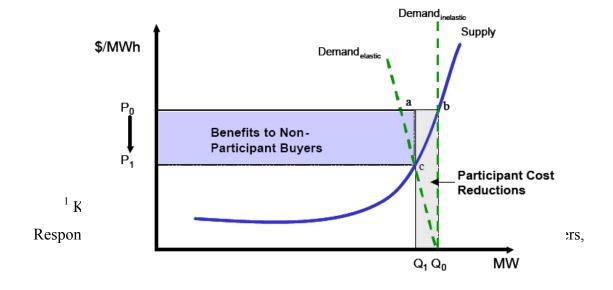
response resources and by explaining the importance of a metering/data

3637

in Northern Illinois. A discussion of demand response starts with the

38

following supply curve.¹ It demonstrates the benefits of demand response



39		to all electricity consumers:
40		
41	Q.	Please describe the above graph.
42	A.	The graph demonstrates generally the value of supply curve participation
43		by demand response resources - direct value to participants and indirect,
44		more substantial value to all electric consumers in Northern Illinois.
45	Q.	How is the balance of your testimony organized?
46	A.	My testimony is organized as follows: I first define demand-side
47		resources and discuss the benefits derived form a robust demand-side
48		resources industry in Northern Illinois. I then support Mr. Skadowski's
49		recommendation to develop a meter/data infrastructure as the most
50		important action that the Commission can take to foster a demand
51		response resource in Northern Illinois.
52	III. Te	estimony
53	Q.	From an industry perspective, what are demand response resources?
54	A.	Demand-side resources ("DSR") is commonly referred to as, and for
55		purposes hereof, used interchangeably with "demand response." The term
56		"resources" adds recognition to customers' ability to be used as system
57		resources. The US Demand Response Coordinating Council defines
58		demand response as:
59		Providing electricity customers in both retail and wholesale electricity
60		markets with a choice whereby they can respond to dynamic or time-based
61		prices or other types of incentives by reducing and/or shifting usage,

62		particularly during peak periods, such that these demand modifications can
63		address issues such as pricing, reliability, emergency response, and
64		infrastructure planning, operation, and deferral.
65	Q.	What are the benefits of a robust DSR industry in Illinois?
66	A.	Most fundamentally, DSR reduces the cost of energy to customers. DSR
67		also provides value to generating companies, electric grid operators,
68		distribution companies, and retail energy service providers. DSR benefits
69		include:
70		Lower, more stable electricity prices – DSR lowers electric prices for all
71		consumers by introducing competitive resources into the daily mix and by
72		clipping electric price spikes.
73		Economic efficiency - An efficient electricity market, like any other
74		efficient market, depends upon the appropriate interaction of supply and
75		demand.
76		Improved reliability – DSR expands the reliability resources available to
77		grid operators. DSR is especially valuable in metropolitan areas where
78		generation and transmission are expensive and difficult to site. Finally,
79		DSR mitigates against extreme system reliability events that are expensive
80		to remedy with traditional generation solutions.
81		Increased risk management - DSR helps manage electric volume and
82		price risk.

83		Environmental benefits – DSR enables more stable and more efficient
84		loading of coal-fired plants. Stable operation enables better tuning of
85		pollution control systems. Efficient loading enables less coal burn.
86		Market power mitigation - DSR improves confidence in competitive
87		markets by introducing broadly dispersed competitive resources into a
88		supply mix dominated by a few large generating companies.
89		Reduced T&D system build-out – Targeted DSR helps defer or avoid
90		T&D infrastructure upgrades, especially significant in metropolitan areas
91		where undergrounding is costly.
92	IV. R	ecommendations
93	Q.	Do you support Mr. Skadowski's recommendation to develop a meter/data
94		infrastructure.
95	A.	Yes. A meter/data infrastructure, as proposed by Mr. Skadowski is the
96		most important action and first step that the Commission can take to foster
97		a demand response resource in Northern Illinois. Moreover, interval data
98		access should be liberally and freely provided for use by BOMA Chicago
99		members and the many energy service companies with whom they do
100		business, for several reasons:
101		Competitive demand response industry – the Commission should
102		provide DSR infrastructure and institutional support that invites competing
103		DSR providers into Northern Illinois. DSR competitors have proven their
104		capabilities and their value in several other parts of the country, including
105		other parts of PJM.

106	Mitigating Cost of Market Entry for DSR competitors – the best way
107	to make Northern Illinois attractive to DSR providers - and to improve
108	DSR competition - is provide a metering/data infrastructure. An
109	institutional infrastructure removes both an entry cost for DSR providers
110	and a switching cost for their customers.
111	Strengthening Demand Response Analysis and Valuation – a
112	metering/data infrastructure enables DSR program designers,
113	policymakers and customers to anticipate demand response impacts and
114	benefits. Also, demand response program managers and overseers need to
115	be able to reliably measure the net benefits of demand response options to
116	ensure that they are (cost-effectively) providing needed demand
117	reductions.
118 Q.	Does this conclude your testimony?
119 A.	Yes.